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REEL #80

CASKO, JULIUS
TO

Z/037/60/000/006/009/010
E192/E382

AUTHOR: Čajko, Július

TITLE: Investigation of the Moments of Atomic Nuclei by the
Methods of Optical Spectroscopy ¹⁹

PERIODICAL: Československý časopis pro fysiku, 1960, No. 6,
pp. 559 - 579

TEXT: The article is a review dealing principally with the electromagnetic hyperfine structure of atomic spectra. This structure is due to the mutual interaction between the electron envelope of an atom and the moments of the nucleus, and by studying the structure spectroscopically it is possible to determine the moments. The nuclear moments such as spin I , magnetic dipole moment μ_1 , electric quadrupole moment Q

and higher-order moments are the principal characteristics of atomic nuclei apart from such known properties as the nuclear charge Z , its mass M or its radius R . The methods of measurement of the moments can be divided into three groups.

I. Methods based on the interaction of nuclear moments with internal atomic or molecular electromagnetic fields.

II. Methods on the interaction of the nuclear magnetic moment

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with an external magnetic field.

III. Methods based on the observation of the radioactive nuclear radiation and on the investigation of nuclear disintegration. The methods of the first group serve to investigate the hyperfine structure of atomic spectra and these are discussed in detail. As regards the second group of methods these are based on the investigation of the molecular and atomic beams and on microwave spectroscopy. The methods of the third group permit measurement of the moment of unstable nuclei such as those of short-life isotopes. For determining the relationship between the hyperfine structure of atomic spectra and nuclear moments it is assumed that an atomic nucleus in the normal state has an impulse momentum I whose absolute value is expressed by means of the quantum number I :

$$|I| = \sqrt{I(I+1)}\hbar$$

(2)

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where I can have a value $0, 1/2, 3/2, \dots$ and $\hbar$ is the Planck constant h divided by 2π . The spin of the nucleus I is combined vectorially with the overall moment of the electron envelope J ; the resulting impulse momentum F of the atom is thus formed. The quantum number F which characterises the vector F obeys the following relationship:

$$F = I + J, I + J - 1, \dots, |I - J| \quad (3)$$

Depending on the orientation of the nuclear spin I with respect to the resultant atomic moment F , the interaction energy between the nucleus and the electron envelope is defined. This energy increment causes splitting of the energy levels of the atom and results in the hyperfine structure of the spectral lines. The final formula for the energy increment is in the form of Eq. (7), where A is a coefficient which is known as the interval vector. From Eq. (3) it follows that F can have $2I + 1$ various values for $J > I$ or $2J + 1$ Card 3/9

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for $J < I$. Consequently, the energy level which is characterised by the quantum number J is split into $2I + 1$ or $2J + 1$ hyperfine sublevels. The transitions between these sublevels are defined by Eqs. (8). With various orientations of vectors J and I the resulting quantum number F can change from $J + I$ to $J - I$ and the energy increment ΔW can have different values. The ratios between the neighbouring levels of the hyperfine structure can be expressed by Eq. (9), where $F_{\max} = I + J$. This formula describes the so-called interval rule. The intensity of the components of the hyperfine structure is a function of the quantum numbers F , I and J . The experimentally measured intensities can thus be directly compared with the known theoretical values and provided J is known it is possible to determine the magnitude of the spin I . When a radiating atom is placed in a strong magnetic field the coupling between vectors J and I is perturbed and the magnetic moments corresponding to these vectors will interact

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with the external magnetic field. Each energy level with the quantum number J will be split into $2J + 1$ sublevels and the interaction between the nuclear moment and the external field results in the splitting of each sublevel into $2I + 1$ further sublevels. The degeneration of the original state is thus destroyed and each level with a quantum number J is split into $(2J + 1)(2I + 1)$ Paschen-Back sublevels. The transitions between sublevels are governed by the selection rules defined by Eqs. (12), where M_J and M_I are the projections of the vectors $\mathbf{J}$ and $\mathbf{I}$ on the direction of the external field. The electromagnetic interaction between the atomic nucleus and the electrons is described by the magnetic interaction operator defined by:

$$V_{\text{magn}} = - \frac{1}{c} \int (\mathbf{A} \cdot \mathbf{e}) d\tau. \quad (14)$$

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where $\mathbf{A}$ is the vector potential of the nucleus and

$\mathbf{j}$ is the vector of the electron current density.

Eq. (14) can also be expressed as Eq. (16). The energy
increment ΔW which causes the shift of the energy levels
in the case of electromagnetic interaction is defined by
Eq. (19). This is written in the final form as Eq. (20),
where the interval factor $\mathbf{A}$ is defined by Eq. (21). In
order to determine μ_i from Eq. (21) it is necessary to

know the interval factor and the quantity $H(0)$. The interval
factor is expressed by Eq. (23), where various parameters are
defined by Eqs. (24) and (25). The final expression for
the magnetic moment of the nucleus is in the form of Eq. (28),
where δ is the correction factor proposed by Rosenthal and
Breit, ϵ is the Bohr correction factor and $\mu_I^{(0)}$ is the

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value of the nuclear magnetic moment determined from simplified formulae. In the investigation of the hyperfine structure it is often found that a considerable deviation from the interval rule is observed. This is due to the mutual perturbation between the electrons or to the electric quadrupole moment of the atomic nucleus. The electrostatic interaction between the nucleus and the electrons is expressed by the operator defined by Eq. (30), where $e\rho_e$ is the charge density of the electrons in an elementary volume $d\tau_e$, $e\rho_n$ is the charge density of an elementary volume of the nucleus $d\tau_n$ and r is the distance between $d\tau_e$ and $d\tau_n$. The electrostatic interaction operator can be expressed by Eq. (32), where V_{bod} is the operator of the Coulomb interaction between the electrons and the nucleus and V_Q is the perturbation operation of the quadrupole interaction which is determined by the additional

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energy ΔW_Q of the atomic states. This energy is expressed
by Eq. (33), where C is given by Eq. (34). Since the inter-
action between the nuclear magnetic dipole and the electrons
of the envelope plays an essential part in the hyperfine
splitting of the spectral lines the magnitude of the splitting
can be estimated from Eq. (37), where μ_0 is the Bohr magneton.

M is the mass of a proton, m is the mass of an electron
and r is the distance between an electron and the nucleus.
In the experimental techniques used in the investigation of
the hyperfine structure, it is necessary to choose suitable
spectrum sources. These should meet the following conditions.

- 1) They should radiate narrow lines.
- 2) The intensity of the lines should be sufficiently high.
- 3) It should be possible to excite only a small quantity of
the investigated element.

A discharge tube with a hollow cathode can be used as a suitable
spectral source since it permits the reduction of the Doppler

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effect. This type of tube is shown in Fig. 10. The tube is filled with argon or helium at a pressure of 0.2 to 1 mm Hg. The investigated substitute is situated in the cavity of the cathode and is introduced into the discharge by the ion bombardment. The cavity is cooled by liquid nitrogen. For investigating the hyperfine structure it is necessary to use a spectral instrument of very high resolving power. The Fabry-Perot interferometer (Ref. 158) is a suitable instrument for this purpose. Later developments of this instrument, such as the use of photomultipliers for measuring very low light intensities, have extended the range and scope of this instrument and made the measurements easier, more accurate and more sensitive. There are 11 figures and 205 references: 20 Soviet, 4 Czech, 1 Swiss, 3 French, 33 German, 1 Japanese (in English), 2 Swedish and 141 English.

ASSOCIATION: ÚJV ČSAV, Prague

SUBMITTED: January 14, 1960

Card 9/9

CAJKO, Julius

Recording high-resolution spectrometer with the Fabry-Perot interferometer. Cs gas fys 14 no.2:105-118 '64

1. Ustav jaderného výzkumu, Československá akademie věd, Rez.

SHAYKO, Yu. [Cajko, J.]

Isotope shift of the 3988 Å resonance line in ytterbium. Opt.
i spektr. 18 no.2:351-352 F '65. (MIRA 18 4

1. Institut yadernykh issledovaniy Chekhoslovatskoy akademii
nauk, Rahezh u Bragi, Chekhoslovakiya.

CAJKOVA, E., Dr.

Optic atrophy following epidemic parotitis. Cesk. pediat. 10 no.8:
618-620 Oct 55.

1. II. detska klinika KU v Bratislave. Prednosta Doc. Dr.
J. Michalickova.

(PAROTITIS, in infant and child
epidemic, causing optic nerve atrophy.)

(NERVES, OPTIC, diseases
atrophy caused by epidemic parotitis in inf. & child.)

CAJEKOVA, E.; SCHWALBOVA, M.

Cerebral complications in rheumatic carditis in children.
Cesk. pediat. 11 no.4:268-271 Apr 56.

1. II. detska klinika LFUK Bratislava, prednosta: doc. MUDr.
J. Michalickova.

(BRAIN, diseases,

in rheum. heart dis. in child. (Cz))

(RHEUMATIC HEART DISEASE, in infant and child,
with brain dis. (Cz))

BENKO, J.; CAJKOVA, E.

Rare staphylococcal diseases of the nervous system in children.
(Disseminated cerebral abscesses and a subdural abscess). Cesk.
pedit. 15 no.1:17-24 Ja '60.

1. II. detska klinika lek.fak. UK v Bratislave, prednosta doc.
MUDr. J. Michalickova.

(BRAIN ABSCESS in inf.& child.)

(STAPHYLOCOCCAL INFECTIONS in inf.& child.)

CAJKOVA, E.; BENKO, J.; VAJDA, P.; SZABOVA, I.

Teleangiectatic ataxia--Louis-Bar syndrome. Bratisl. lek. listy
44 no.3:178-183 15 Ag '64.

1. Katedra pediatrie II Lek. fak. Univ. Komenskeho v Bratislave
(veduca prof. MUDr. J. Michalickova).

CAJKOVIC, Ernest, inz.

Emission on the fourth television channel. Tech praca 16
no.5:382-384 My '64.

CAJKOVIC, Ernest, inz.

Present state and prospects of color television. Tech praca
16 no.11:908-912 N '64.

CAJKOVIC, Ernest, inz.

Modern principles of television image recording. Tech praca
17 no.2:138-140 F '65.

CAJKOVA, M.

"Geologic and petrologic situation south of Banska Stiavnica"., P. 146

GEOLOGICKE PRACE; ZPRAVY, (Slovenska akademia vied. Geologicky ustav
Dionyza Stura) Bratislava, Czechoslovakia, No. 4, 1955.

Monthly List of East European Accessions (EEAI), LC, Vol. 8, No. 8, August 1959.

CAJKOVA, M.

"Geologic and petrographic conditions in the area of Ostra Luka, Bacur, and Dubovo."

p. 133 (Casopia Pro Mineralogii A Geologh, Vol. 2, no. 3, 1957, Czcholovakia)

Monthly Index of East European Accessions (EEAI) LC. Vol. 7, No. 2,
February 1958

COUNTRY : CZECHOSLOVANIA D
CATEGORY : Cosmochemistry. Geochemistry. Hydrochemistry
ABS. JOUR. : RZKhim., No. 1 1960, No. 758
AUTHOR : Cajkova, M.
INST. : -
TITLE : Olivine Rocks from Ostro Luka

ORIG. PUB. : Geol. sb., 1958, 9, No 2, 253-264

ABSTRACT : The mineral composition was determined and data of chemical and quantitative spectral analysis cited. According to Rittman's classification, the rock represents olivine-andesine trachy-basalt. The basic features of the chemism are discussed.-- R. Ihmel'nitskiy

CARD: 1/1

CAJKOVA-THOLTOVA, E.

NOVAK, A;CAJKOVA-THOLTOVA, E.

Infantile paralysis in Bratislava, 1948. Pediat. listy
5 no.4:222-225 July-Aug. 1950. (CIML 20:1)

CAJKOVAC, SIME

CAJKOVAC, Sime; PURITIC, Stefanija

Candidasis granulomatosa. Radovi Med. fak. Vol. 3:245-260 1953.

1. Dermatovenerološka klinika Medicinskog fakulteta u Zagrebu
(Predstojnik akademik Fr. Kogoj. Primaljeno 20.VII.1953)
(MONILIASIS
*granulomatous)

CAJKOVAC, Sime, dr., profesor.

Clinical aspects and treatment of dermatomycoses. Med. glasnik.
9 no.11-22:398-404 Nov-Dec 55

1. Dermatovenerološka klinika Medicinskog fakulteta u Zagrebu
(upravnik akad. prof. dr. P. Kogoj)

(SKIN, dis.

fungus dis., clin. aspects & ther. (Ser)

(FUNGUS DISEASES,

skin, clin. aspects & ther. (Ser)

GAJTHAML, E., dr.

Organization of the gas industry management. Paliva 45 no.2:66-
69 F '65.

1. Association of Gas Factories.

CAJTHAML, E., dr.

Basic conditions of the sale of fuel gases, petroleum, and gasoline. Paliva 45 no.3:89-91 Mr '65.

1. Association of Gas Factories.

Cardiology

9

CZECHOSLOVAKIA

SOVA, J.; PAICHL, P.; ~~VANĚK, J.~~; POKORNY, M.; HULA, J.; JANEK, A.; CAJZL, L.; CEPELAK, V.; PETEROVA, E.; SIGMUND, R.; LAHN, V.; VOHNÍK, S.; Clinic of Internal Diseases, Med. Fac., Charles Univ. (Klinika Chorob Vnitřních Lek. Fak. KU), Plzeň, Prednosta (Head) Prof Dr J. SOVA; Internal Department Local Institute of National Health, Factory Hospital (Interní Oddělení MUNZ. Zavodní Nemocnice Odborového Podniku) Skoda, Plzeň, Head (Prednosta) Docent Dr M. POKORNY; Psychiatric Clinic Med. Fac. Charles University (Psychiatrická Klinika Lek. Fak. KU), Plzeň, Head (Prednosta) Prof Dr E. VENCOVSKÝ; Sídlo Pathological and Anatomical Institute Med. Fac. Charles University (Sídlo Patologickoanatomický Ústav Lek. Fak. KU), Plzeň; Head (Prednosta) Prof Dr J. VANĚK; Group for the Development of Programming Methods (Skupina Rozvoje Programovacích Metod v Odborovém Podniku) Skoda, Plzeň, Head (Vedoucí) A. KATOUEIKY; Chair of Mathematics, Electrotechnical Faculty College of Mechanical Engineering (Katedra Matematiky Elektrotechnické Fakulty VSSE), Plzeň, Head (Vedoucí) Docent J. KLATIL; Central Biochemical Laboratory (Ústřední Biochemické Laboratoře) FN, Plzeň, Head (Prednosta) Dr V. LAHN.

"Use of Digital Computers in the Evaluation of Pathogenesis, Diagnosis, and Prognosis of Myocardial Infarction."

... 2. 25. 12. 66 nn 683-

CZECHOSLOVAKIA

Prague, Casopis Lekaru Ceskych, Vol 105, No 24-25, 17 Jun 68, pp 683-684

Abstract: Computer evaluation of data obtained in the study of acute infarct of the myocardium is described. 280 indicators were used which allowed the use of 2200 characteristic codes. A 50 page code was prepared. All 280 indicators use numbers 1 to 9, and data on one patient are contained on 4 cards. The first problem is the determination of the frequency of correlation complexes of the most important signs of an acute myocardial infarct. 2 Western references

2/2

- 9 -

benign CAJZL, Ludvik

BOBEK, Karel

CZECHOSLOVAKIA

Prof. MUDr.

Director of the Clinic for Internal Diseases of
the Medical Faculty of KU (Karlova Universita - Charles
University), Plzen

Prague, Prakticky Lekar, No. 19, 1962, pp 817-820, 820-826

"Contribution to Diagnostics of Benign Endocrinal Tumors",
Part I. and II.

Co-authors:

BROZKOVA-MORAVKOVA, Vilemina, MD, same as above, or
Central X-ray Department of State Faculty Hospital,
Plzen; Assistant Director: Z. Chudacek, Dr.
CAJZL, Ludvik, MD, same.

2/2

CAJZL, L.

CZECHOSLOVAKIA

BROZKOVA, V; CAJZL, L.

Internal Medicine Clinic of the Medical Faculty of UK
(Vnitřní klinika lékařské fakulty UK), Pilsen
(for both)

Prague
Děné, Vnitřní lékařství, No 7, 1963, pp 708-710

"The Galactorrhea and Amenorrhea Syndrome Associated
with Pituitary Neoplasm."

BOBEK, K., prof. dr. [deceased]; CAJZL, L.; CEPELAK, V.; SLAISOVA, V.;
OPATRNÝ, K.; BARCAL, R.

Venous diseases and the role of various factors in their development. Cas. lek. česk. 104 no. 14: 361-369 9 Ap '65

1. Klinika chorob vnitřních fakulty všeobecného lékařství v
plzni (prednosta: prof. dr. K. Bobek [deceased]).

CASZL, M.

3000

621.318.3 : 621.3.013

2778. Phase shift of the magnetic fluxes in a single-phase magnet. M. CASZL. *Elektrotech. Obzor*, 43, No. 5, 263-71 (1954) in Czech.

CZ.F.

It is usually maintained that the mutual displacement of the magnetic fluxes in such a magnet is due to the short-circuiting ring placed near the air gap. It is mostly overlooked that the permeability of the material also has an influence on the separation of the magnetic fluxes into parallel branches, as well as the magnitude and distribution of the losses in the magnetic circuit. These influences can be analysed by comparing the magnetization and voltage curves of parallel magnetic circuits of magnets consisting of the same and of different magnetic materials, as well as their power curves and hysteresis loops. By combining the information supplied by these curves it becomes possible to draw the corresponding vector diagrams from which the actual phase shifts may be determined for any practical case.

M. F. KRIVOS

621.318.3 : 621.825

SMN 925

CAJZNER, L.

POLAND/Chemical Technology. Chemical Products and Their
Application. Ceramics. Glass. Binders. Concrete.

H-13

Abs Jour: Ref Zhur-Khim., No 13, 1958, 44125.

Author : Cajzner Ludwik.

Inst :

Title : Decrease in Activity of Slag Slurry on Storage.

Orig Pub: Mater. budowl., 1957, 12, No 11, 345-349.

Abstract: Slag slurry (SS) obtained on wet grinding of granulated blast furnace slag without an activating agent can be stored for 8 hours prior to use without loss of its hydraulic properties. On longer storage the activity of SS decreases and after 24 hours following its preparation the activity ...

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POLAND/Chemical Technology. Chemical Products and Their
Application. Ceramics. Glass. Binders. Concrete.

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Abs Jour: Ref Zhur-Khim., No 13, 1958, 44125.

is only 90-70% of the initial. Extent of activity loss of SS on prolonged storage depends but little on the initial activity of the original slag. More suitable for the production of SS for immediate use are slags with a ratio $\text{SiO}_2/\text{Al}_2\text{O}_3 = 3.0-4.5$ and a basicity modulus 0.9-1.2. As an initiator of hardening, portland cement of grade "250" should be added (15-30%).

Card : 2/2

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S/081/62/000/016/017/043
B168/B186

AUTHOR: Čáka, Václav

TITLE: Converter with a catalyst in a fluidized bed

PERIODICAL: Referativnyy zhurnal. Khimiya, no. 16, 1962, 300-301,
abstract 16I116 (Czechosl. patent 98405, February 15, 1961)

TEXT: An apparatus for carrying out catalytic reactions in refining, synthesis and other processes under high pressure and at high temperature is proposed. This apparatus is distinguished by the fact that the inter-space between the tubes of the heat exchanger 1 is connected to the catalyst chamber 2. The reacting gas moves in the space between the apparatus walls 3 and the insert for the catalyst 4; being heated in the space between the tubes of the heat exchanger 1 by the heat from the waste gas, it reacts in bed 2 of fluidized catalyst and leaves the apparatus via tube 5 through the space between the tubes of the heat exchanger 1. [Abstracter's note: Complete translation.]

Card 1/1

(AKA) DOVA, J. H.

The crystallography of several organic phosphates. F. Hanic and J. A. Cakajdova (Slovakian Acad. Sci., Bratislava). *Acta Cryst.* 11, 127-8 (1953) (in English).—When S is substituted for an ester O, no change in structure type, and very little change in lattice dimensions occurs. When S is substituted for the double-bonded O on the P, considerable change occurs in structure type and dimensions, as illustrated by the following unit cell data. For $(OC_6H_4NO_2)_2P(O)OEt$, the space group is $P2_1/c$, 4 mols. per unit cell, with dimensions $a = 16.38$, $b = 11.88$, $c = 8.05$ Å, $\beta = 92^\circ 18'$. For $(OC_6H_4NO_2)_2P(O)SEt$ the space group is also $P2_1/c$, 4 mols. per unit cell, whose dimensions are $a = 16.94$, $b = 11.85$, $c = 8.06$ Å, $\beta = 95^\circ 26'$. For $(OC_6H_4NO_2)_2P(S)OEt$, on the other hand, space group is $P1$ or $P1$, there are 2 mols. per unit cell of dimensions $a = 7.16$, $b = 13.05$, $c = 12.54$ Å, $\alpha = 127^\circ 27'$, $\beta = 87^\circ 54'$, $\gamma = 101^\circ 14'$. For $(OC_6H_4NO_2)_2P(S)OMe$, the space group is $P2_1/c$, 4 mols. per unit cell with dimensions $a = 10.50$, $b = 23.22$, $c = 7.25$ Å, $\beta = 101^\circ 12'$. For $(OC_6H_4NO_2)_2P(O)SCH_3$, the space group is $P1$ or $P1$, 4 mols. per unit cell with $a = 14.47$, $b = 16.06$, $c = 7.92$ Å, $\alpha = 71^\circ 50'$, $\beta = 76^\circ 45'$, $\gamma = 88^\circ 21'$.
A. J. Mabis

Distr: 4E20(j)/4E3d

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I. A. Chkaidova

6.
20 May

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The crystal structures of $\text{Cu}(\text{NH}_3)_4\text{Br}_2$ and $\text{Cu}(\text{NH}_3)_4\text{Cl}_2$.
F. Hanic and I. A. Chkaidova (Dokl. Akad. Wiss., Berlin, *Acta Cryst.* 11, 010-12 (1958) (in German).—The isomorphous compds. $\text{Cu}(\text{NH}_3)_4\text{X}_2$ with X either Br or Cl crystallize in the cubic system with $a = 4.068$ Å. for the Br compd., $a = 3.907$ Å. for the Cl-compd., $Z = 1/2$. The structure may be described as a NH_3X structure in which NH_3 has been replaced by NH_3 and the Cu atoms occupy the centers of the cube-faces, statistically, with av. wt. $1/2$. Each Cu atom lies midway between 2 NH_3 groups, whereas each NH_3 group is attached to one Cu atom only. All Cu atoms and NH_3 groups thus are present as complex ions $\text{Cu}(\text{NH}_3)_4^{++}$ with linear sp -hybridization. Av. distances Cu-N 2.034 Å.; Cu-Br 2.670 Å. An explanation of the structure of $(\text{NH}_3)_4[\text{Cu}(\text{NH}_3)_4\text{Br}_2]$ is also given. W. N.

28 29

1 9898-66 EWP(t)/EWP(b) IJP(c) JD/JW

ACC NR: AP6003380

SOURCE CODE: CZ/0043/65/000/007/0513/0520

AUTHOR: Matiasovsky, Kamil--Matiasovskii, K. (Engineer; Candidate of sciences); ²⁶
~~Cakajdova, Irina--Chakaydova, I.~~ (Engineer; Candidate of sciences); ²³ Malinovsky, Milan--
Malinovski, M. (Doctor; Engineer; Candidate of sciences)

ORG: [Matiasovsky; Cakajdova] Institute of Inorganic Chemistry, Slovak Academy of Sciences, Bratislava (Ustav anorganickej chemie Slovenskej akademie vied);
 [Malinovsky] Inorganic Technology Faculty, Slovak Technical University, Bratislava (Katedra anorganickej technologie Slovenskej vysokej skoly technickej)

TITLE: Phase diagram of the system NaF-LiF-AlF sub 3-Al sub 2 O sub 3 (I) system NaF-LiF

SOURCE: Chemicke Zvesti, no. 7, 1965, 513-520

TOPIC TAGS: phase diagram, sodium compound, ²¹fluoride, lithium fluoride, solid solution

ABSTRACT: The phase diagram of the system NaF-LiF was constructed. The components form a eutectic with a composition of 39.6% of NaF and 60.4% LiF. The eutectic crystallizes at 659+2°C. The experimental values agree well with the calculated values. On the NaF side of the diagram there is a region of solid solutions of LiF in NaF. The limiting concentration of LiF in a solid solution at the temperature of eutectic crystallization is 4 mole %. The existence of solid solutions was confirmed by X-ray phase analysis. Orig.

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ACC NR: AP6003380

art. has: 4 figures. [JPRS]

SUB CODE: 07 / SUBM DATE: 20Feb65 / ORIG REF: 001 / OTH REF: 014
SOV REF: 008

PC
Card 2/2

POLAND

~~CAKALA, A.~~ Poultry Diseases Research Office (Zaklad Chorob
Drobiu Inst. Wet.) Pulawy. Prof. Dr. K. Marek, Head.

"A Strain of Celo Virus Isolated from Pheasants"

Lublin, Medycyna Weterynaryjna, Vol 22, No 5, pp 261-264

Abstract: The CELO virus (Chicken Embryo Lethal Orphan Virus) was isolated from the respiratory tract of young pheasants, for the first time in Poland. The identifications of the virus was based on comparative investigations of infected chicken embryos, a test of resistance to chloroform and agargel precipitation-test.

Contains 2 Tables and 16 references (1 Polish, 8 Western and 7 German-language).

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POLAND

TRUSZCZYNSKI, K., CIOSEK, D., and CAKALA, A. Microbiology Office,
Veterinary Institute (Zaklad Mikrobiologii Inst. Wet.), Pulawy. Doc. Dr.
K. Truszczyński, Head; Department of Poultry Diseases, Veterinary Institute
(Zaklad Chorob Drobiu Instytutu Wet.), Pulawy. Prof. Dr. K. Marek, Head.

"Anti-E. coli Antibodies in Sera of Hens Showing Symptoms of Respiratory
System Diseases"

Lublin, Medycyna Weterynaryjna, Vol 22, No 4, 1966, pp 200-204.

Abstract: Hen sera from various parts of Poland were examined by the O and
K agglutination tests using antigens from three E. coli serotypes. The O
agglutination tests were carried out on sera reacting negatively in the sero-
logical tests for mycoplasmosis from birds showing no respiratory tract
disease, and two positive reacting sera from birds with and with-
out respiratory disease symptoms. A comparison of the O and K tests has shown
the latter to be more sensitive. The results show that mycoplasmosis is
frequently complicated by E. coli.

Contains a summary in English, 2 Tables and 13 references (3 Polish, 9 Western
and 1 German-language).

1/1

CAKALA, Stanislaw (Gdansk)

Observations on distemper in minks. Rocz nauk roln wet 70 no.1/4:240
'60. (EEAI 10:9)

(Minks) (Distemper)

CAKALA, Stanislaw
SURNAME, Given Names

Country: Poland

Academic Degrees: Not given

Affiliation: Temporary Ambulatory Clinic, NYS Veterinary College, Cornell University, Ithaca, NY; Director: Prof. M. G. FINCHER, DVM.

Sources: Warsaw, Medycyna Weterynaryjna, Vol XVII, No 9, September 1961, pp 520-524.

Data: "The Use of a Magnet in Cases of Foreign Bodies in the First Three Compartments of the Bovine Stomach."

(2)

156

GPO 981647

GAKALA, S. (Warszawa)

Uniqueness solutions of the first and third problems of Fourier relative to the normal linear equation of the parabolic type in a noncylindric domain. Roczniki matematyczne no. 7:111-117 '62.

CAKALA, S. (Warszawa)

Limit property of the generalized potential of space charge
relative to a parabolic equation. AnnalesPol math 13 no.3:
221-240 '63.

POLAND

CAKALA, Stanislaw, Dr., [Affiliation not given]

"On the Physiology of the Alimentary Tract in Ruminants."

Warsaw-Lublin, Medycyna Weterynaryjna, Vol 19, No 3, Mar 63,
pp 121-125.

Abstract: The author reviews the investigations of recent years which threw much light on the true role of the rumen and reticulum in the digestive process of ruminants. He outlines the differences in the mechanics and chemistry of this digestion, the differences in the absorption and metabolism of the various foodstuffs, and points to the differing hazards and disorders to which the digestive tract of ruminants is therefore subject, and how to prevent and treat them. There are 12 references, of which six each are English and German.

1/1

POLAND

CAMALA, Stanislaw, Dr., Veterinary Institute (Instytut Weterynaryjny) in Pulawy

"Observations on the Enzootic Disease Coryza contagiosa bovum."

Warsaw-Lublin, Medycyna Weterynaryjna, Vol 19, No 8, Aug 63, pp 439-443

Abstract: [Author's English summary modified] Within a period of 3 months, 7 cows out of a herd of 40 contracted Coryza contagiosa bovum, with only two recovering. Author gives the details of the clinical, histopathological, and biological examinations which led to the diagnosis and discusses possibilities for error in its differentiation from cases of "mucosal disease complex" and "mucosal disease" proper, recently described in the neighboring West European countries. There are 42 references, of which about 5 are German, and the others Western, primarily from the USA.

1/1

CAKALA, Stanisław; RAKALSKA, Zofia

Experimental pinealectomy in the rat. Acta physiol. Pol. 15
no.4:587-592 J1-Ag '64

1. Z Pracowni Fizjopatologii Instytutu Weterynarii w Puławach
(Kierownik: dr. S. Cakala) i z Zakładu Farmakologii Doswiadczałnej
i Lecznictwa Instytutu Weterinarii w Puławach (Kierownik: doc.dr.
T. Juszkiewicz).

ACC NR: AP6026211

(A)

SOURCE CODE: PO/0071/65/000/009/0532/0534

AUTHOR: Cakala, Stanislaw--Tsonkala, S. (Doctor)

B

ORG: Physiopathologic Laboratory/headed by Doctor Stanislaw Cakala/, Veterinary Institute, Pulawy (Pracownia Fizjopatologii Instytutu Weterynarii)

TITLE: Technic for puncture of abomasum in cattle

SOURCE: Medycyna weterynaryjna, no. 9, 1965, 532-534

TOPIC TAGS: diagnostic medicine, surgery, animal disease therapeutics, commercial animal, animal parasite

ABSTRACT: The author describes the technique of puncture and injections into the abomasum on the basis of experience with 74 cattle. Tranquilin was administered to the cattle before the puncture. The puncture was made in the central line joining the xiphoid cartilage of the sternum with the umbilicus, using for the purpose needles for epidural anaesthesia (12 cm, Ø 2 mm). The solutions were introduced into the abomasum by means of a syringe connected to the needle by a rubber tube. Orig. art. has: 2 figures. [Based on author's Eng. abst.] [JPRS: 33,500]

SUB CODE: 06, 02 / SUBM DATE: none / OTH REF: 017

Card 1/1 *ech*

CAKALA, Sylwin

Boundary property of the transversal derivative of the single layer potential of a normal parabolic equation when the time variable converges to infinity. Matematyka Warszawa Pol no.2: 47-56 '64

1. Department of Mathematics *B*, Technical University, Warsaw.

CAKAL, S. (Warsaw)

Boundary property of the transversal derivative of the matrix of the generalized potential of a simple layer relative to a parabolic system. Annales Pol math 16 no.2:221-229 '65.

1. Submitted July 5, 1963.

CAKAR, LJ.

Development of orchard trees in Macedonia and San Jose scale. p.1
SOCIJALISTICKO ZEMJODELSTVO (Društvo no agronomi i zemjodelski
tehnici na NR Makedonija) Skopje. Vol. 8, no. 4, Apr. 1956

SOURCE: East Europe Accession Lists (EEAL),
Library of Congress, Vol. 5, no. 11, Nov. 1956

4. DOKIC, Slobodan, dipl. inz.; CAKARA, Marica, dipl. inz.

Preparation of oximes by ion exchange resins. Kem ind 13 no.4:
261-266 Ap '64

1. "Pliva" Plant of Chemical and Pharmaceutical Products, Zagreb.

CAKAREVIC, Mladen, inž.

Geotechnic investigations on the profile of the Rastovaca Dam.
Saop Inst vodopr Cerni no.12:35 '58.

CAKAREVIC, Mladen, inz.

Analysis of the rocks considered for the foundations of the barrage
of the Zaton Hydroelectric Power Plant. Saop Inst vodopr Cerni no.12:
35-36 '58.

RADOSAVLJEVIC, Zivorad, inz.; CAKAREVIC, Mladen, inz.

Geotechnical studies on the profile of the barrage of the Komarnica
Hydroelectric-Power Plant. Saop Inst vodopr Gerni no.14:1-11 '59.

CZECHOSLOVAKIA / Zooparasitology - Helminths.

G-2

Abs Jour : Ref Zhur - Biol., No 18, 1958, No. 81701

Author : Cakay, E.

Inst : Not given

Title : Sterliadochona Ssavini - A New Parasite in Czechoslovakian Trout

Orig Pub : Biologia, 1957, 12, No 11, 863-866

Abstract : No abstract given

Card 1/1

CARL, JOSEF

CZECH

Physiological alcohol values in blood. Josef Carl (Hlyst. Ústav lékařské fak. Plzeň, Czech.) ~~Calby, Tassara, Ces-~~
Lyrá 93, 689-91(1954). The EtOH blood level without
previous EtOH intake showed an av. of 0.00333%.
Ivo M. Hala

EXCERPTA MEDICA Sec 17 Vol 5/3 Public Health Mar 59

1018. CAUSES OF MASS INTOXICATIONS WITH SUBLIMATE (MERCURIC CHLORIDE) - Příčiny hromadných otrav sublimátem u horníků - Čakl J. Pízeň - PRACOV. LÉK. 1958, 10/2 (138-140)

The chronic intoxication of miners with a solution of sublimate from impregnated timber is described. The wooden framework was continually splashed by water from the ground, which dispersed in the form of a rain; an aerosol thus developed. The intoxication occurred by inhalation, as well as by the alimentary and inoculation routes. The sublimate intoxication was established by clinical findings as well as by chemical examinations, and finally (after replacing the wooden framework and providing the chimney with concrete) by negative Hg estimations in atmosphere and water.

CAKLOS, Pavel

Blocking the entrance to internal switchboard cells. Energetika Gz
11 no.8:385 Ag '61.

MASEK, V.; ČAKRIOVA, E.

Two months coke slackening by diluted sulphite refuses of
Trojice coke-kilns. Česk. hyg. 9 no.3:181-187 Ap'64.

1. Vyzkumny a zkusebni ustav NHKG, Ostrava-Kuncice;
Krajska hygienicko-epidemiologická stanice, Ostrava.

*

CAKRT, Eduard; BARAN, Vaclav

Extraction of hydrolyzed uranyl solutions. Jaderna energie
10 no.1:19 Ja'64.

1. Ustav jaderného výzkumu, Československá akademie věd, Rez.

CAKRT, Eduard

Effect of the concentration of nitric acid, extraction agents, and temperature on the Zr^{95} extraction by tributyl phosphate. Jaderna energie 10 no. 2:52-53 F '64.

1. Ustav jaderného výzkumu, Československá akademie věd,
Rez.

SRATIER, V.; CAKRT, E.

Extraction of ^{95}Zr trace concentrations from acid-deficient uranyl nitrate solutions by means of 30 per cent tributyl phosphate. Chem Cz Chem 29 no.11:2738-2752 N '64.

1. Institut für Kernforschung, Tschechoslowakische Akademie der Wissenschaften, Rez near Prague.

CAKRTOVA, Eva

Acute inhalation poisoning with organic solvents, especially benzene with fatal outcome. Prac. lek. 16 no. 9:423-425 N ' 64

1. Odbor hygieny prace, Krajska hygienicko-epidemiologicicka stanice Severomoravskeho kraje v Ostrave (vedouci V. Blaha, prom. lek.).

BLAHA, V., prom. lékař; ČÁKRTOVÁ, E.; SLEPČKA, J.; ZAPLETALOVÁ, E.; VOLF, J.

Noise hazards in iron works. Prac. lek. 17 no.3:95-101 Ap'65.

1. Odbor hygieny práce , Krajská hygienicko-epidemiologická stanice v Ostravě (vedoucí V. Blaha, prom. lékař) a Oddělení chorob z povolání Krajské nemocnice s poliklinikou v Ostravě (vedoucí: MUDr. J. Rosmanith).

CZECHOSLOVAKIA

UDC 613.63:621.775.7:628.511

CAKRTOVA, Eva: Department of Work Hygiene, Krajska Station of Hygiene and Epidemiology of the North Moravia Kraj (Odbor Hygieny Prace KHES Severomoravskeho Kraje), Ostrava, Head (Prednosta) Dr Z. JIRAK.

"Work Hazards in the Production of Sintered Carbides."

Prague, Pracovni Lekarstvi, Vol 18, No 6 - 7, Aug 66, pp 290-297

Abstract [Author's English summary modified]: Production of W, Ti, Ta, and Cr carbides by powder metallurgy is discussed; in some processes Co powder is used as binder. The dust concentration in the atmosphere is the health hazard in this industry. The amount of dust reaches 50 mg/ cubic m, with particles approximately of 2.5 microns. All the metals mentioned are present in the dust. The reason for the high dust concentration is a wrong method of removal of the fine particles from the enclosed spaces. The worst conditions are met during the machining of the parts. Suitable ventilation methods are discussed. 8 Figures, 1 Table, 18 Western, 4 Czech, 7 Russian, 1 East German reference. (Manuscript received 3 Dec 65).

1/1

ČAKURS, Janis; JAUGIETS, Valdemars; LEVI, S., red.

[Academician Karlis Bambergs; a biobibliography] Akademikis Karlis Bambergs; biobibliografija. Rīga, Latvijas PSR Zinatnu akad. izd-ba, 1964. 101 p. [In Latvian and Russian] (MIRA 17:6)

1. Latvijas Padomju Socialistiskas Republikas Zinatnu Akademijs. Fundamentala biblioteka.

CALABEK, J.

СЕНТРАЛЬНАЯ/Plant Physiology - General Problems.

1-1

Also Jour : Ref Zhur - Biol., No 4, 1958, 15144

Author : Calabek, J., Novak, J.

Inst :

Title : The Study of Autonomous Movements by the Method of Light Wave

Orig Pub : Prace Biologiczne naklad. CS.N, 1957, 23, No 2, 123-126

Abstract : The autonomous movements of the hypocotiles of the mung bean were filmed by the method of "photostereography" exposure, and this permitted the construction of the curves of the top's movements. The trajectory of the movement was an ellipse. The period required for the description of various sized ellipses was the same.

Card 1/1

CALABEK, J. ; CHYTILOVA, V. ; NOVAK, J.

"Contributions to the study of the growth and motion of plants." p. 217.

PRACE. Ceskoslovenska akademie ved. Brnenska zakladna. Brno, Czechoslovakia, Vol. 31,
no. 4, 1959.

Monthly List of East European Accessions (EEAI), LC, Vol. 8, No. 8, August, 1959.
Uncl.

CAIA BEK, Jan

International Conference on Scientific Film in Gottingen. Vestnik
GSAV 70 no.5:715 '61.

CALABEK, Jan

Beginnings and development of the scientific film in Czechoslovakia.
Vestnik CSAV 72 no.1:44-52 '63.

GALATKA, Jan

Motion pictures produced by the Czechoslovak Academy of
Sciences shown at international meetings. Vestnik CSAV
72 no.2:242-243 '63.

RUMANIA/Cultivated Plants. Potatoes, Vegetables, Melons.

M

Abs Jour: Ref Zhur-Biol., No 17, 1958, 77694.

Author : ~~Calacatin, N.~~ Carza, Gh.

Inst : Institute of Agronomy, Iasi.

Title : Influence of Granulated Fertilizers on Tomato Harvest.

Orig Pub: Anuarul lucrur. stiint. Inst. agron. Iasi. Bucuresti,
1957, 175-183.

Abstract: No abstract.

Card : 1/1

CALACREZO, Constantin

A new point of view in the treatment of deficient children.
Rev psihologie 9 no. 4: 549-555 '63.

COUNTRY : RUMANIA
CATEGORY : Chemical Technology. Chemical Products and Their
Application. Pharmaceuticals. Vitamins. Antibiotics
ABS. JOUR. : RZhKhim., No 17, 1959, No. 61833
AUTHOR : Murea, L.; Iacob, A.; Calafeteanu, I.
INSTITUTE : -
TITLE : Physico-Chemical Determination Methods for Nicotinic Acid and Its Amide in The Pharmaceutical*
ORIG. PUB. : Farmacia (Romin.), 1958, 6, No 4, 333-349

ABSTRACT : Comparative investigation of chemical, photometrical, and polarographic determination methods of nicotinic acid (I) and of its amide (II) was conducted, employing the above substances in a pure form as well as components of pharmaceutical preparations. It was established, that the chemical method gives good results in the determination of I when in pure form or when contained in tablets. The determination of II by chemical method is difficult. The photometric method yielded good

*Preparations.

Card: 1/2

H - 70

COUNTRY :
CATEGORY :

H

ABS. JOUR. : RZhKhim., No 17, 1959, No. 61833

AUTHOR :
INSTITUTE :
TITLE :

ORIG. PUB. :

ABSTRACT : results in determinations of I contained in ampoules and tablets. The best results were rendered by the polarographic method in the determinations of both I and II as a pure substance or in combinations present in various pharmaceutical preparations. The method offers rapid determination, furthermore, II may be determined in the presence of I.

Card: 2/2

COUNTRY : Rumania H-17
CATEGORY :
ABR. JOUR. : RSKhim., No. 21 1959, No. 75821
AUTHOR : Russu, C., Calafeteanu, I., and Iacob, A.
DATE : Not given
TITLE : Application of the Refractometric Method to the
Quantitative Determination of Magistral Mixtures
ORIG. PUB. : Farmacia (RPR), 6, No 6, 505-510 (1958)
ABSTRACT : The authors have studied the possibility of apply-
ing the refractometric method of analysis to a
series of magistral mixtures most frequently en-
countered in medical practice and have determined
constants required for the analysis of the follow-
ing substances: codeine phosphate, caffeine,
sodium benzoate, and sparteine sulfate.
From authors' summary

CARD: 1/1

KALAFETEANU, I.

BERAL, Kh. [Beral, C] (Bukharest); DEMETRESKU, Ye. (Bukharest); STOICHESKU, V. (Bukharest); KALAFETEANU, I. (Bukharest); GRINTSESKU, P. (Bukharest)

Methods for controlling pharmaceutic preparations. Apt. delo 10 no.4:
82-85 J1-Ag '61. (MIRA 14:12)

1. Institutul de Cercetari Farmaceutice si Sontrolul Medicamentelor,
Bucuresti.

(DRUGS—STANDARDS)

GRINTESCU, P.; CALAFETEANU, I.; IVAN, G.

Contributions to the determination of 2-(naphthyl-methyl)-2-imidazoline hydrochloride (Rinofug). Rev chimie Min petr 15 no.7:424 J1 '64

~~L-31855-66~~

ACC NR: AP6021283

SOURCE CODE: RU/0003/65/016/001/0041/0041

AUTHOR: Calafeteanu, I.--Kalafetyanu, I.; Dumitrescu, E.--Dumitresku, Ye.;
Grintescu, P.--Grintsesku, P. 13
B

ORG: Chemical-Pharmaceutical Research Institute (Institutul de cercetari chimico-farmaceutic)

TITLE: Quantitative determination of diacetylhexestrol

SOURCE: Revista de chimie, v. 16, no. 1, 1965, 41

TOPIC TAGS: drug, pharmacology

ABSTRACT: Since the drug Sintofolin (diacetylhexestrol) is to be listed for the first time in the new Pharmacopaeia, the authors tested several methods for its determination. Results with gravimetric and volumetric determination methods were not satisfactory, but a simple, precise and reproducible method of bromatometric determination was elaborated and is described. Orig. art. has: 1 table. [JPRS]

SUB CODE: 06 / SUBM DATE: none / OTH REF: 002

Card 1/1 JS

L 39125-66

ACC NR: AP6030354

SOURCE CODE: RU/0003/65/016/003/0169/0169

AUTHOR: Beral, H.; Calafeteanu, I.; Dumitrescu, E.; Grintescu, P. 29

ORG: Institute for the State Control of Drugs and Pharmaceutical Research (Institutul pentru controlul de stat al medicamentelor si cercetari farmaceutice) B

TITLE: Quantitative determination of 7-chloro-2-methylamino-5-phenyl-3H-1, 4-benzodiazepin-4-oxide from librium pills 22

SOURCE: Revista de chimie, v. 16, no. 3, 1965, 169

TOPIC TAGS: dioxane, chloroform, perchloric acid, tranquilizer, pharmacology

ABSTRACT: The authors tested several methods for the analysis of Librium pills. Best results were obtained by titration with perchloric acid in dioxane as titrating agent, of the ground pills dissolved in chloroform. Methyl red was the most effective indicator. Orig. art. has: 1 table. [JPRS]

SUB CODE: 07, 06 / SUBM DATE: none / OTH REF: 003

Card 1/1

PAPPO,A.; MIRON,C.; CAIALB,A.; ZAMFIRESCU-GHEORGHIU,Marcela

Exploration of the principal common bile duct by duodenal chromo-
intubation with azorubin. Probl. ter., Bucur. 10 no.3:101-111 '59.

(BILE DUCTS,function tests)

(DUODENUM)

(DYES)

MICU, D.; CALALB, A.; SAFIRESCU, Eugenia; MAXIMILLIAN, Stefania

Aspects of the bone marrow and blood before and after splenectomy
in some systemic diseases. Stud. cercet. med. intern. 2 no.1:69-76
'61.

(SPLEEN surgery) (HEMATOPOIETIC SYSTEM diseases)
(HYPERSPLENISM complications)

TURAI, I., prof.; SOARE, M., dr.; CALALB, A., dr.; STEFANESCU, V., dr.;
ROSEALA, E., dr.

Costal phlebography as a method of exploration in portal hypertension.
Med. intern., Bucur 13 no.1:143-147 Ja '61.

(HYPERTENSION, PORTAL diagnosis)
(ANGIOGRAPHY)

CALALB, A.

SURNAME, Given Names

Country: Rumania

Academic Degrees: not given; presumably M.D.

Affiliation: 2nd Surgical Clinic, Medical Faculty Bucharest /original not given/

Source: Prague, Ceskoslovenska Gastroenterologie, Vol XV, No 5, Aug 61, pp 321-325

Data: Postoperative testing of common bile duct patency by chromocholoscropy."

TZURAI, I., Director of Clinic

PAPPO, A.

CALAL, A.

TZANE, G.

670 981643

CALALB, C.

GYERGYAI, F.; HADNAGY, Cs.; KINDA, K.; CALALB, C.; BRAUNER, G.; SZENTKIRALYI, I.;
KREPSZ, I.

Role of tetanus toxin and endotoxins of coli dispepsiae in the mitotic
activity of the organism. Kiserletes orvostud. 10 no.1:77-80 Feb 58.

1. Marosvasarhelyi Orvostudományi és Gyógyszertészeti Intézet Kóronctani
Intézete, Bukaresti Onkológiai Intézet és Székelyudvarhelyi Közegésze-
gységi laboratórium.

(ESCHERICHIA COLI

endotoxins of coli dispepsiae, inhib. of mitotic activity in
mice (Hun))

(TETANUS

toxin, inhib. of mitotic activity in mice (Hun))

(CELL DIVISION

mitosis inhib. by endotoxins of coli dispepsiae & tetanus toxin
in mice (Hun))

ARDELEAN, I.; CALALE, Gh.; IENISTEA, C.; MESROBEANU, L.; GRIGORIU, T.;
STANICA, E.; DUMITRESCU, V.; NITRICA, N.; FOTINO, M.

Anti-diphtheria vaccination in the Rumanian People's Republic;
study of the immunizing value of diphtheria anatoxin of Ramon as
compared with precipitated anatoxin. Stud. cercet. inframicrobiol.,
Bucur. 6 no.3-4:477-512 July-Dec. 1955.

(DIPHTHERIA, prev. & control

vacc., comparative value of Ramon's anatoxin & precipitated
anatoxin)

(VACCINES AND VACCINATION

diphtheria vaccines, comparative value of Ramon's anatoxin
& precipitated anatoxin)

CALALB, G.; SARAGEA, Alice; MAXIMESCO, Paula; avec la collaboration de:
CIOROLIANU, Natalia; POPESCO, Ana; POPA, Suzana; MIHAILESCO, Ana

Research on a liquid enrichment for bacteriological diagnosis of diphtheria. Arch. Roum. path. exp. microbiol. 20 no.1:95-101 Mr '61.

1. Travail de l'Institut "Dr. I. Cantacuzino" - Service de la Diphterie et du Laboratoire du Centre Anti-epidemie Regional (SANEPID) de Bucarest.

(DIPHTHERIA diagn)

ROMANIA

Dr G. CALALB, Dr Alice SARAGEA, Dr Paula MAXIMESCU, Dr Ecaterina STANICA, biologist (biolog) Cecilia STOIAN and Dr R. OPRISAN. Study by the Diphtheria Section of the Institute (Sectia de difterie, Institutul) "Dr. I. Cantacuzino," Bucharest.

"Study of a Focus of Diphtheria. Part 2. Laboratory Investigations."

Bucharest, Microbiologia, Parazitologia, Epidemiologia, Vol 7, No 6, Nov-Dec 1962; pp 509-514.

Abstract: /English summary modified/: Bacteriologic data on an epidemic of diphtheria caused by a very virulent strain in 1959 apparently in a village near Bucharest: 33 persons had it; from among 579 contacts, 68 were found to be carriers of the organism; 130 of *C. xerosis*, 55 *C. hoffmannii*; 8 atypical non-toxicogenic corynebacterial strains. Also, isolated from dogs, were 26 atypical corynebacteria while 15 dogs were free of the organisms. The epidemic was subdued in 3 weeks with energetic public health measures. Detailed serologic and bacteriologic data on the various strains. Four Western, 9 Rumanian, 2 Polish and 1 Soviet reference.

1/1

24

CIUCA, M.; CALALB, G.; SARAGEA, Alice; MAXIMESCU, Paula; MEITERT, Eugenia

Lysogeny and conversion to toxigenesis in the phago-bacterial ecology of *Corynebacterium diphtheriae*. Arch. roum. path. exp. microbiol. 21 no.2:240-246 '62.

1. Travail de l'Institut "Dr. I. Cantacuzino" -- Centre National de Bacteriophages-References et Service de la Diphterie.
(BACTERIOPHAGE) (CORYNEBACTERIUM DIPHTHERIAE)
(TOXINS AND ANTITOXINS)

SARAGEA, Alice; MAXIMESCO, Paula; MEITERT, Eugenia; DIACONU, Jana;
MARION, Maria; OLINESCO, Eleonora; CALALB, Gh.

Ecological relations between the biotypes of *Corynebacterium diphtheriae* and the phage-bacteria systems. Attempted phage typing of *Corynebacterium diphtheriae*. Arch. roum. path. exp. microbiol. 21 no.2:391-396 '62.

1. Travail de l'Institut "Dr. I. Cantacuzino" -- Centre National de
Bacteriophages -- References et du Service de la Diphterie.
(CORYNEBACTERIUM DIPHTHERIAE) (BACTERIOPHAGE TYPING)
(ECOLOGY)

STANICA, Ecaterina, dr.; STOIAN, Cecilia, biolog.; CALALB, Gh., dr.;
In colaborare cu: POPESCU, P., dr.; ANTONESCU, Odile, dr.;
EDUARD, Hilde, dr.; GARTNER, Magda, dr.

Some considerations on the Schick test. Microbiologia (Bucur)
8 no. 4:377-381 JI-Ag '63.

1. Institutul "Dr. I. Cantacuzino" (for Stanica, Stoian, Calalb).
2. Insectia de Stat pentru Igiena si Protectia Muncii, regiunea Bucuresti (for Popescu, Antonescu, Edward).
3. Laboratorul central pentru controlul de stat al serurilor si vaccinurilor (for Gartner).

(DIPHTHERIA) (IMMUNOLOGY) (DIPHTHERIA TOXIN)

CALALB, G.; SARAGEA, Alice; MEITERT, Eugenia; COSMAN, Maria

Contribution to the study of experimental diphtheria. Arch.
Roum. path. exp. microbiol. 22 no.1:123-130 Mr '63.

(DIPHTHERIA)

CALALB, G.; SARAGEA, Alice; MAXIMESCO, Paula, MEITERT, Eugenia; STANICA, Ecaterina; STOIAN, Cecilia; CALALB, G.G.

Contribution to the study of the distribution and biological characteristics of *C. diphtheriae* in Rumania. Arch. roum. path. exp. microbiol. 22 no.4:931-936 S-D'63

1. Travail de l'Institut "Dr. I. Cantacuzino"; Service de la Diphterie.

CALALB, G.; STANICA, Ecaterina; SARAGEA, Alice; MAXIMESCO, Paula; KRANZDORF, H.; MEITERT, Eugenia; STOIAN, Cecilia.

Brief review on the progress made in specific diphtheria prophylaxis in Rumania. Arch. roum. path. exp. microbiol. 23 no.3: 585-590 S'63

1. Travail de l'Institut "Dr. I. Cantacuzino"; Service de la Diphterie; Bucarest.

STANICA, Ecaterina; STOIAN, Cecilia; MAXIMESCO, Paula; STOIAN, I.;
CALALB, G.

Contribution to the titration of diphtheria toxin-antitoxin on
tissue cultures. Arch. Roum. path. exp. microbiol. 23 no.4:
1017-1024 D '64.

1. Travail de l'Institut "Dr. I. Cantacuzino", Service de la
Diphtherie. Submitted June 28, 1964.

EPIDEMIOLOGY

RUMANIA

616.931-08(R)

CALALB, Gh., Dr. Work performed at the "Dr I. Cantacuzino" Institute (Institutul "Dr. I. Cantacuzino").

"Problems Connected with the Practice of Diphtheria Eradication in the Socialist Republic of Rumania."

Bucharest, Microbiologia, Parazitologia, Epidemiologia, Vol 11, No 4, Jul-Aug 66, pp 301-304.

Abstract: After defining the problems involved in the eradication of diphtheria, the author summarizes the measures taken in Rumania in recent years towards this end as well as planned further and continuing work. As a result of the anti-diphtheria activities, which are under the direction of the Central State Health Inspectorate and use prophylactic materials supplied by the "Dr. I. Cantacuzino" Institute, the diphtheria morbidity in Rumania reached a figure of 0.08 ‰.

Manuscript submitted 2 April 1966.

1/1